2.6   Text

A.   Introduction

Text requirements for notes, dimensions, titles, and headings used for
project plan sheets have been consolidated and standardized for CADD
use. With the implementation of MicroStation J, Caltrans has created a
new font, which will be the standard. The new font is called "CTFONT1",
which has a numerical value of 3. CTFONT1 is a replication of the
previous standard font, "LEROY", but with modifications to the kerning
(space for each letter) of some letters. Additional characters were added
to both CTFONT1 and LEROY. The LEROY font will still be used for
mapping purposes.

NOTE: Caltrans Fonts, which are currently being used, are shown in the
             Appendix of this manual.

B.   Text Size - Highway & Landscape Project Plans

In the Caltrans CADD system, all Highway and Landscape drawings are
created at one "Design Plane" size of 429,496 squared meters. Plans are
developed at a ratio of 1 to 1, but can be plotted at any desired scale.
Text sizes were determined based on how the text looked within the
border sheet and what information should be shown more prominently.
The size for the text listed in the table below, is based on a plotting scale
of 1:500 (Caltrans Base Scale). It is important to place text at the
appropriate CADD size within the drawing based on the intended scale of
the plotted plan sheet.

The following table defines the text sizes to be used for Highway and
Landscape project plan sheets:

TEXT – For Highway/Landscape Projects
and Photogrammetry

DESCRIPTION	SIZE *	FONT	WEIGHT
Title Project Description	TX = 3.7	43	0
Name and ID Code of Individual Plan Sheets, (does not apply to the Title Sheet.	TX = 3.7 **	43	0
Titles for Quantity Tables and Detail Drawings	TX = 3.0	43	0
Country and State boundary	TX = 2.8	43	0
City Names on the Title Sheet Strip Map	TX = 2.5	43	0
Begin and End Work on Title Sheet. Titles for Informational Tables	TX = 2.5	3	2
Subtitles for Tables and Detail Drawings. Route and Route No. Headings in Quantity of Summary	TH = 2.2 TW = 2.2 ***	3	2
River Names (Water Ways)	TX = 1.8	3 ****	1
Majority of Text, (including text with drawings, tables and dimensioning	TX = 1.8	3	1
Restricted Space for Placement of Text	TH = 1.8 TW = 1.5	3	0
Photogrammetric Mapping Text	TX = 1.5	2	1

*   TX = represents height (TH) and width (TW) in meters for Caltrans standard 1:500 drawings. See Appendix A6-9 for text sizes at other acceptable plotting scales (fonts and weights remain the same.)

**   Adjustable if necessary (TX = 3.0 minimum).

***   Reduce text width (TW = 1.8 minimum), if needed for restricted space.

****   Do not use Font 23. It is obsolete and does not have the appropriate spacing for characters or the desired appearance for certain letters. Use the Caltrans standard Font 3 (ctfont1) with a slant angle of 25 degrees.

Option: If a plan sheet has multiple routes and is a busy and cluttered sheet, making it difficult to see the route labeling, then the Route and Route No. may be placed using a text size of (TX 2.5, Font 43, WT 0) if space allows. (The optional text size is the same as for Begin and End Work.)

C.   Text Size - Structures

The working units for Structures is Master Units: meter and Sub Units: millimeter. The Table below shows the text size for a full-size drawing, which has the resolution set at 1000 millimeters per meter and 10,000 positional units per millimeter.

DESCRIPTION	TEXT SIZE	FONT	WEIGHT
Informational notes - majority of plan lettering requirements and border information	.0036	3	1 or 2
Detail Titles	.0061	3	4
Detail Titles	.0061	43	0
Sheet Titles and Border information	.0061	43	0

Size of Font (both height and width) is in meters for a full-size drawing.

As the positional units are changed to accommodate a different scale, the size of the text will vary automatically. The table below shows the proper size of text for each scale. **NOTE**: the text size shown in the table is for Informational notes.

METRIC SCALE	mm Per m	POSITIONAL UNITS	TEXT SIZE
1:1 (full-size)	1000	10000	.0036
1:2 (half-size)	1000	5000	.0072
1:2.5	1000	4000	.0090
1:5	1000	2000	.0180
1:10	1000	1000	.0360
1:20	1000	500	.0720
1:25	1000	400	.0900
1:40	1000	250	.1440
1:50	1000	200	.1800
1:80	1000	125	.2880
1:100	1000	100	.3600
1:125	1000	80	.4500
1:200	1000	50	.7200
1:250	1000	40	.9000
1:400	1000	25	1.4400
1:500	1000	20	1.8000
1:1000	1000	10	3.6000
1:2000	1000	5	7.2000
1:5000	1000	2	18.0000
1:10000	1000	1	36.0000

D.   Text Size – Right of Way (R/W) Mapping Products

In the Caltrans CADD system, all R/W drawings are created at one "Design Plane" size of 429,496 squared meters. Maps are developed at a ratio of 1 to 1, but can be plotted at any desired scale. Text sizes were determined based on how the text looked within the border sheet and what information should be shown more prominently. The size for the text listed in the table below, is based on a plotting scale of 1:500 (Caltrans Base Scale). It is important to place text at the appropriate CADD size within the drawing based on the intended scale of the plotted plan sheet.

Right of Way uses several fonts that are specific for their use only. These specific fonts are 4 (CTFONT-RW), 7 (Adline), 55 (Fancy–Old Mon. Font2) & 56 (Shadow). Fonts are shown in the Appendix of this manual.

DESCRIPTION	SIZE *	FONT	WEIGHT
Predominantly Numeric Annotation including bearings & distances, curve data, coordinates, and stationing.	TX = 1.25	3	1
Detail Labels (i.e. DETAIL "A" & SEE DETAIL "A")	TX = 2.5	3	3
"NO SCALE" label	TX = 1.25	3	2
Descriptive Annotation including easement descriptions, "EXISTING R/W", "CITY LIMITS"	TX = 1.25	4	1
Route Label along alignment	TX = 1.75	4	2
Map Sheet Reference Label (i.e. "SEE MAP 81328")	TX = 2.0	4	2

Lot/Block/Parcel Labeling
    Large (i.e. BLOCK 9)
    Medium (i.e. LOT 2)
	TX = 3.0
	TX = 2.5
		4	1
			1

County and City Labels	TX = 6.5	7	2

Government Landnet Labeling
    Township & Range
    Large (i.e. SECTION 1)
    Medium (i.e. GOVT TRACT 21)
    Small (i.e. GOVT LOT 3)
	TX = 3.5
	TX = 3.0
	TX = 2.5
	TX = 2.0
		55	3
			1
			1
			1

Subdivision & Record Map Labeling
    Large (i.e. ROS 6-8)
    Medium (i.e. PM 2-3)
    Small (i.e. OR 7-11)
	TX = 3.5
	TX = 3.0
	TX = 2.5
		56	2
			2
			2

*   TX = represents height (TH) and width (TW) in meters for Caltrans standard 1:500 drawings.